

AMENDMENT TO THE CLAIMS

Please amend the claim as follows:

39. (Twice Amended) A method for fabricating a semiconductor device, comprising the steps of:

- a) forming a semiconductor layer of a Group III nitride containing a dopant over a substrate;
- b) forming a p-side electrode out of a metal on the semiconductor layer; and
- c) after introducing the substrate into a vacuum chamber, charging plasma into the vacuum chamber to form an ambient of plasma while keeping the temperature of the substrate without heating the substrate, thereby making the conductivity type of the semiconductor layer p-type,
wherein the ambient of the plasma includes nitrogen plasma.